GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM

Instrument Procedures Group October 23-24, 2001 HISTORY RECORD

FAA Control # <u>01-02-236</u>

Subject: Vertical Descent Angle Charting

Background/Discussion: Jeppesen is advertising standard instrument approach procedures (SIAPs) not sanctioned by the government. Attachment 1 is the government chart of the VOR or GPS RWY 27R, Amdt 11 at Fort Lauderdale-Hollywood Intl, FL (KFLL). This is an on-airport VOR, no-FAF SIAP, with a GPS overlay. The government source document (form 8260-5) does not have a stepdown fix, no reference to a computer navigation fix (CNF) and does not have a vertical descent angle (VDA) published. A VDA may only be established on SIAPs with a final approach fix or stepdown fix (TERPS, paragraph 252a and TIL 99-014). Attachment 2 is the Jeppesen chart of the same SIAP. The Jeppesen version contains a vertical descent angle of 3.98?, which is outside TERPS limits (Maximum allowable VDA is 3.77?, per TERPS, paragraph 252). Jeppesen has also charted the runway threshold and a threshold crossing height of 71 feet. If this procedure had an established VDA on the source document, the angle would be established as close as possible to a 3.00 degree angle and the TCH would comply with TERPS, Table 18A.

Recommendation: Jeppesen should cease general public charting and take action to remove from charting any vertical descent angles on SIAPs that are on-airport no-FAF procedures.

Comments: This recommendation affects Jeppesen public charting policy.

Submitted by: Bradley W. Rush

Organization: AVN-160 Phone: (405) 954-0188 FAX: (405) 954-1301 Date: 10/11/01

INITIAL DISCUSSION (Meeting 01-02): Issue presented by Brad Rush, AVN-160. AVN-100 is concerned that Jeppesen is making non-approved alterations to procedures for civil use that are not sanctioned or supported by government source data (8260-series form). Specifically, Jeppesen is adding VDAs and TCHs to on airport, no-FAF SIAPs. Jeppesen's computations appear to be based on a computer navigation fix (CNF) which was added to accommodate the GPS overlay process. Using the CNF results in publication of descent gradients that exceed TERPS criteria. FAA policy specifies that VDAs are only applicable to SIAPs with a FAF. Therefore, Brad recommends that Jeppesen cease publishing VDAs not supported by the FAA. Bill Hammett, AFS-420 (ISI), commented that this appeared to be a radical departure from Jeppesen's normal policy of always requiring source data to support their products. Kevin Comstock, ALPA, stated that he understood that the FMS task force position was that VNAV and stabilized descent charting was to be for with-FAF procedures only. Dave Goehler, Jeppesen, stated that their legal department was reviewing the issue.

Jeppesen also would like to brief the issue at the next FMS Task Force meeting and will report back to the next ACF. ACTION: Jeppesen.

MEETING 02-01: Jim Terpstra, Jeppesen, explained the CNF "sensor FAF" concept and that current Advisory Circulars (ACs) explain that sensor FAFs must be at 4NM. Jim has worked with AFS-420 to get sensor FAFs moved to 7NM for CAT A&B and to 6 NM for CAT C&D when the descent gradient at 4 NM is greater than 400 ft/NM. This will provide a better descent gradient. There is a problem in achieving this however, as AFS-420 created the sensor FAFs without AVN involvement. Jim volunteered that Jeppesen would create Form 8260-2's to support these CNFs provided AVN-100 will QC them. Brad Rush stated that current resources preclude his office getting involved with reviewing and processing Jeppesen forms. Brad restated that Jeppesen should not be changing a procedure government documented and added that these no-FAF SIAPs with GPS overlays should be removed from publication ASAP, preferably via AFS docket action. Norm LeFevre agreed to pursue this issue in AFS-420. See related issue 02-01-244. ACTION: AFS-420.

MEETING 02-02: Jim Terpstra, Jeppesen, briefed that this issue cannot be resolved unless FAA agreed to assist in relocating the sensor FAFs. The VDA presents a problem when the sensor FAF-to-threshold descent gradient exceeds 400 Ft/NM (3.77 degrees). Bill Hammett, AFS-420 (ISI), suggested that an alternate solution would be for Jeppesen to cease putting VDAs on no-FAF procedures. There is no government 8260-series form source for these VDAs as FAA only publishes VDAs on with-FAF procedures. Jim stated that Jeppesen has added the VDAs at the request of their users; however, they would have no problem supporting cancellation of all no-FAF overlay procedures. This position is unacceptable to AOPA (issue 02-01-244). After discussion, Jim agreed that Jeppesen would cease publishing VDAs on no-FAF procedures where the VDA exceeded 3.77 degrees. Jeppesen will make this update to the database ASAP and on charts as they are revised. Brad Rush, AVN-160, noted that the FAA does not plan on coding no-FAF overlay procedures in the government database. The group agreed that the issue may be closed. ITEM CLOSED.